

exam can be used to further delineate the cause of outpatients' symptoms as compared to the limited protocol.

**Author Disclosures:** E. Ascher: Nothing to disclose; K. Gopal: Nothing to disclose; A. Hingorani: Nothing to disclose; T. Jacob: Nothing to disclose; D. Jung: Nothing to disclose; N. Marks: Nothing to disclose; A. Shiferson: Nothing to disclose.

## C11: Poster Presentation II -Other

### PS182.

#### Clinically Significant Incidental Computed Tomographic (CT) Finding in Patients Undergoing Endovascular Aortic Aneurysm Repair

Tze-Woei Tan, Chin-Chin Yeh, Edward J. Marcaccio, Wilfred I. Carney, Jeffrey M. Slaiby. Division of Vascular Surgery, Rhode Island Hospital, Warren Alpert School of Medicine at Brown University, Providence, RI

**Objectives:** Preoperative and follow-up CT scan is the standard of following patient after endovascular aortic aneurysm repair (EVAR). We examined the incidence of clinically significant incidental CT finding in this population of generally higher risk and more elderly patients.

**Methods:** Clinical records and computed tomographic angiograms (CTA) of patients who had undergone EVAR between January 2004 and December 2008 in our center were reviewed retrospectively. 180 consecutive patients with preoperative CTA and more than 12 months follow-up were included in this study. Official CT reports were reviewed. Findings were considered clinically significant if they warrant further treatment, workup or follow-up. Data was analyzed with student t test and  $p < 0.05$  is considered to be significant.

**Results:** 13.89% (25/180) had significant clinical finding on preoperative and postoperative surveillance CT scan. 28% (7/25) had finding consistent with neoplasm requiring further treatment (renal carcinoma;  $n = 4$ , pancreatic neoplasm;  $n = 2$ ; lung cancer;  $n = 1$ ). Other common finding include lung mass  $> 1$ cm and adrenal incidentaloma  $> 1.5$ cm. Overall incidence of neoplasm was 4% (7/180). There were no differences with age, gender and maximum aneurysm size between two groups.

**Conclusions:** As computed tomography continues to impact all areas of surgical practice, it has become increasingly apparent that the significance of incidental findings be examined and documented. The results of this study demonstrate that the CT scans used to monitor and evaluate AAA before and after repair may yield additional benefits for the patient with early detection. Further studies should be done to examine whether these incidental findings lead to surgical intervention or management that impacted patient's overall morbidity or mortality.

**Author Disclosures:** W. I. Carney: Nothing to disclose; E. J. Marcaccio: Nothing to disclose; J. M. Slaiby: Nothing to disclose; T. Tan: Nothing to disclose; C. Yeh: Nothing to disclose.

### PS184.

#### Spectrum of Presentation of Thoracic Outlet Syndrome in Adolescents

Julie A. Freischlag, Kevin Chang, Kylie Davis, Taylor Roethle, Jasmine Demos, Thomas Reifsnnyder. Johns Hopkins, Baltimore, MD

**Objectives:** Since more adolescent patients are being diagnosed clinically with thoracic outlet syndrome, we reviewed the outcomes of our adolescent patients who underwent first rib resection and scalenectomy (FRRS).

**Methods:** A retrospective review of a prospectively acquired data base

**Results:** Thirty-four (13 males/21 females), average age 16.5 (10-18) years, adolescent patients underwent FRRS between 12/04 – 11/09. Eighteen patients (53%) presented with venous symptoms of which 17 had a subclavian vein thrombosis and 1 patient had intermittent compression. Three patients had hypercoagulable disorders and 3 had suffered a pulmonary embolism. Following FRRS, venograms performed in the 17 patients who had a previous thrombosis demonstrated a tight subclavian vein stenosis that was dilated in 11 patients; 3 patients had widely patent subclavian veins and 3 patients had occluded subclavian veins. The median follow-up in these patients was 11 months (1-54 months) and all but 1 of the subclavian veins are patent by duplex scan. Eleven patients presented with neurogenic symptoms at an average of 13 (2-36) months after their symptoms began. All failed physical therapy and 3 patients had a positive lidocaine scalene block. All but 1, who has persistent contralateral symptoms following FRRS, of the 11 patients did well at a median follow-up of 5.5 (1-36) months. Five patients presented with arterial symptoms of compression and ischemia and 1 patient had embolized to the radial artery. All 5 patients underwent FRRS (1 having a rudimentary first rib) and 2 of them had their cervical rib resected too and all did well.

**Conclusions:** This is the largest reported single series of adolescent patients with thoracic outlet syndrome who have undergone FRRS. These patients present more frequently with arterial and venous symptoms than adult patients however one third of this group of patients did have recalcitrant neurogenic symptoms. Rapid return to normal activity in adolescent patients was seen following surgical treatment.

**Author Disclosures:** K. Chang: Nothing to disclose; K. Davis: Nothing to disclose; J. Demos: Nothing to disclose; J. A. Freischlag: Nothing to disclose; T. Reifsnnyder: Nothing to disclose; T. Roethle: Nothing to disclose.

### PS186.

#### The Cranial Radiation Exposure of Vascular Interventionalists

David B. Wilson, Russell A. Becker, Robert G. Molnar, Carlo A. Dall'Olmo. Michigan Vascular Center, Flint, MI

**Objectives:** To quantify a representative Vascular Specialist's occupational exposure to cranial ionizing radiation.